



Gateway Reference

This appendix contains reference information for gateways, including:

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Resynchronization commands are only valid for the Cisco Info Server gateway and are therefore described in the guide for the Cisco Info Server gateway.

For more information about specific gateways, see the documentation available for each gateway on the Cisco Systems Support Site.

Gateway Command Line Options

This section lists the command line options for `nco_gate`, as shown in [Table F-1](#).

Table F-1 Gateway Command Line Options

Option	Description
-authenticate UNIX PAM HPTCB	<p>Specifies the authentication mode to use to verify user credentials. The options are UNIX, PAM, and HPTCB.</p> <p>The default authentication mode is UNIX, which means that the Posix getpwnam or getspnam function is used to verify user credentials on UNIX platforms. Depending on system setup, passwords are verified using the /etc/passwd file, the /etc/shadow shadow password file, NIS, or NIS+.</p> <p>If PAM is specified as the authentication mode, Pluggable Authentication Modules are used to verify user credentials. The service name used by the gateway when the PAM interface is initialized is netcool. PAM authentication is available on Linux, Solaris, and HP-UX 11 platforms only.</p> <p>If HPTCB is specified as the authentication mode, this HP-UX password protection system is used. This option is only available on HP trusted (secure) systems.</p>
-config <string>	Specifies the name of the configuration file to be read at start up. The default is \$OMNIHOME/etc/gatename.conf .
-debug	When specified, debug mode is enabled.
-help	Displays help information about the command line options and exits.
-logfile <string>	Specifies the name of the log file. If omitted, the default is \$OMNIHOME/log/gatename.log .
-logsize <integer>	Specifies the maximum size of the log file in KBytes. The minimum is 16 KBytes. The default is 1MByte.
-name <string>	Specifies the gateway name. This is also the name used in the -server option of nco_sql . If omitted, the default is NCO_GATE .
-nottruncate	Specifies that the log file is not truncated.
-queue <integer>	Specifies the size of the internal queues. The default is 1024. Do not modify unless advised by Cisco Systems Support.
-stacksize <integer>	Specifies the size of the internal threads. The default is 256 Kbytes. Do not modify unless advised by Cisco Systems Support.
-uniqueolog	If -logfile is not set, this option forces the log file to be uniquely named by appending the process ID of the gateway to the end of the default log file name. If -logfile is set, this has no effect.
-version	Displays version information and exits.

Reader Commands

This section describes the available reader commands for gateways.

START READER

Syntax

```
START READER <reader_name> CONNECT TO <srvr_name> [USING FILTER <filter_name>]
[ORDER BY '<column>, ... [ASC | DESC]' ] [AFTER IDUC DO '<update_command>' ]
[IDUC = <integer>] [JOURNAL_FLUSH = <value1>] [IDUC_ORDER];
```

Usage

Starts a reader named *<reader_name>* which connects to a Cisco Info Server named *<srvr_name>*. The optional **USING FILTER** clause, followed by the name of a filter that has been created using the **CREATE FILTER** command, enables you restrict the number of rows affected by gateway updates. The filter replaces an **SQL WHERE** clause, so the gateway only updates the rows selected by the filter.

The optional **ORDER BY** clause instructs the gateway to display the results in sequential order, depending on the values of one or more column names, in either descending (**DESC**) or ascending (**ASC**) order. If the **ORDER BY** clause is not specified, no ordering is used.

The optional **AFTER IDUC** clause instructs the gateway to perform the update specified in the *<update_command>* in the Cisco Info Server when it places alerts in the writer queue. This is used to provide feedback when alerts pass through a gateway.

The value specified in the optional **IDUC = <integer>** clause indicates an IDUC interval for gateways that is more frequent than the value of **Granularity** property set in the source Cisco Info Server. This enables gateway updates to be forwarded to the target more rapidly without causing overall system performance to deteriorate.

The value specified in the optional **JOURNAL_FLUSH = <integer>** clause indicates a delay in seconds between when the IDUC update occurs in the Cisco Info Server (every Granularity seconds) and when the journal entries are retrieved by the gateway. Normally, only journal entries that have been made in the last Granularity seconds are retrieved. When the system is under heavy load, set this clause so journal entries are retrieved for the last integer + Granularity seconds. This prevents the loss of any journal entries that are created after the IDUC update but before the gateway retrieves the entries. Any duplicate journal entries retrieved are eliminated by deduplication.

The optional **IDUC_ORDER** clause specifies the order in which the IDUC data is processed. The default processing mode for gateways is to process **DELETE** statements, followed by **UPDATE** statements, followed by **INSERT** statements. Do not change this clause unless you have been advised to do so by Cisco Systems Support.

Example

```
START READER NCOMS_READER CONNECT TO NCOMS USING FILTER CRIT_ONLY  
ORDER BY 'SERIAL ASC' AFTER IDUC DO 'update alerts.status set Grade=2';
```

This example uses the **Grade** field as a state field. Initially, all Cisco Info Mediators set **Grade** to **0**. The gateway filters any alerts that have a **Grade** of **1**. After the alerts have passed through the gateway, the **AFTER IDUC** update provides alert state feedback by changing the value of the **Grade** field to **2**.

STOP READER

Syntax

```
STOP READER <reader_name>;
```

Usage

Stops the reader named *<reader_name>*. This command will not stop the reader if the reader is in use with any routes.

Example

```
STOP READER NCOMS_READ;
```

SHOW READERS

Syntax

```
SHOW READERS;
```

Usage

Lists all the current readers that have been started and are running on the gateway. This command can only be used interactively.

Example

```
SHOW READERS;
```

Writer Commands

This section describes the available writer commands for gateways.

START WRITER

Syntax

```
START WRITER <writer_name>  
(TYPE=<writer_type> , REVISION=<number>  
[ , <keyword_setting> [ , <keyword_setting>] ...]);
```

Usage

Starts a writer named `writer_name`. This is followed by a list of comma-separated keyword settings. The first setting must be a **TYPE** setting indicating the `<writer_type>`. The next setting must be a **REVISION** setting. This is currently set to **1** for all writers. The remaining keywords and their settings depend on the type of writer.

Example

The example shown starts the writers for a bidirectional Cisco Info Server gateway. Note the use the **COUNTERPART** in each writer:

```
START WRITER NETCOOLPRI_WRITER  
(  
TYPE = OBJECT_SERVER,  
REVISION = 1,  
SERVER = NETCOOLPRI,  
MAP = SERVER_MAP,  
COUNTERPART = NETCOOLPRI_READER  
);  
  
START WRITER NETCOOLBAK_WRITER  
(  
TYPE = OBJECT_SERVER,  
REVISION = 1,  
SERVER = NETCOOLBAK,  
MAP = SERVER_MAP,  
COUNTERPART = NETCOOLBAK_READER  
);
```

STOP WRITER

Syntax

```
STOP WRITER <writer_name>;
```

Usage

Stops the writer called <writer_name>. If any route is using this writer, the writer will not be stopped.

Example

```
STOP WRITER ARS_WRITER;
```

SHOW WRITERS

Syntax

```
SHOW WRITERS;
```

Usage

Lists all current writers in the gateway. This command can only be used interactively.

Example

```
1>SHOW WRITERS;
2>GO
Name           Type Routes Msgq Id Mutex Id Thread
-----
SNMP_WRITER  SNMP  1      15    0      0x001b8cd0

1>
```

SHOW WRITER TYPES

Syntax

```
SHOW WRITER TYPES;
```

Usage

Lists all the currently known types of writers supported by the gateway. This command can only be used interactively.

Example

```

1> SHOW WRITER TYPES;
2> GO
Type      Revision      Description
-----
ARS1      Action Request System V3.0
OBJECT_SERVER1  Netcool/OMNibus ObjectServer V3.6
SYBASE1   Sybase SQL Server 10.0 RDBMS
SNMP1     SNMP Trap forwarder
SERVICE_VIEW1  Service View

```

SHOW WRITER ATTRIBUTES

Syntax

```
SHOW WRITER {ATTRIBUTES | ATTR} FOR <writer_name>;
```

Usage

Shows all the settings (attributes) of the writer named <writer_name>. The **ATTRIBUTES** keyword is interchangeable with the abbreviated **ATTR** keyword.

This command can only be used interactively.

Example

```

1> SHOW WRITER ATTR FOR SNMP_WRITER;
2> GO
Attribute      Value
-----
MAP            SNMP_MAP
TYPE           SNMP
REVISION       1
GATEWAY        penelope

1>

```

Mapping Commands

This section describes the available mapping commands for gateways.

CREATE MAPPING

Syntax

```
CREATE MAPPING <mapping_name> (mapping [ , mapping ]);
```

Usage

Creates a mapping file to be named <mapping_name> for use by a writer. Mapping lines have the following syntax:

```
{string | integer} = {string | integer | name | real | boolean}
[ON INSERT ONLY] [CONVERT TO {INT | STRING | DATE}]
```

The first argument is an identifier for the destination field and the second argument is an identifier for the source field (or some preset value).

The right-hand side of the mapping is dependent on the writer with which the mapping is to be used. See the appropriate writer section of the individual gateway guide, available on the Cisco Systems Support Site.

The optional **ON INSERT ONLY** clause determines the update behavior of the mapping. Without the **ON INSERT ONLY** clause, the field is updated every time a change is made to an alert. With the **ON INSERT ONLY** clause, the field is inserted at creation time (that is, when the alert appears for the first time) but is not updated on subsequent updates of the alert even if the field value is changed.

The optional **CONVERT TO** type clause allows the mapping to define a forced conversion for situations where a source field may not match the type of the destination field. The type can be **INTEGER**, **STRING**, or **DATE**. This forces the source field to be converted to the specified date type.

Example

```
CREATE MAPPING SYBASE_MAP
(
  'Node'='@Node' ON INSERT ONLY,
  'Summary'='@Summary' ON INSERT ONLY,
  'Severity'='@Severity');
```

DROP MAPPING

Syntax

```
DROP MAPPING <mapping_name>;
```

Usage

Removes the mapping named <mapping_name> from the gateway. This command will not drop the map if it is being used by a writer.

Example

```
DROP MAPPING SYBASE_MAP;
```

SHOW MAPPINGS

Syntax

```
SHOW MAPPINGS;
```

Usage

Lists all the mappings currently created in the gateway. This command can only be used interactively.

Example

```
1> SHOW MAPPINGS;
2> GO
Name                               Writers
-----
SNMP_MAP                            1

1>
```

SHOW MAPPING ATTRIBUTES

Syntax

```
SHOW MAPPING {ATTRIBUTES | ATTR} FOR <mapping_name>;
```

Usage

Shows the mappings (attributes) of the mapping named <mapping_name>. The **ATTRIBUTES** keyword is interchangeable with the abbreviated **ATTR** keyword. This command can only be used interactively.

Example

```
SHOW MAPPING ATTR FOR SYBASE_MAP;
```

Filter Commands

This section describes the available filter commands for gateways.

CREATE FILTER

Syntax

```
CREATE FILTER <filter_name> AS <filter_condition>;
```

Usage

Creates a filter named <filter_name> for use by a reader. The filter specification is an SQL condition. SQL conditions are described in [Conditions, page 2-13](#).

Examples

```
CREATE FILTER HIGH_TALLY_LOG AS 'Tally > 100';  
CREATE FILTER NCOMS_FILTER AS 'Agent = \'NNM\'';
```

LOAD FILTER

Syntax

```
LOAD FILTER FROM '<file_name>';
```

Usage

Loads a filter from a file. Filter files have a `.elf` file extension.

Example

```
LOAD FILTER FROM '/disk/filters/newfilter.elf';
```

DROP FILTER

Syntax

```
DROP FILTER <filter_name>;
```

Usage

Removes the filter named `<filter_name>` from the gateway. The filter will not be dropped if it is being used by a reader.

Example

```
DROP FILTER HIGH_TALLY_LOG;
```

Route Commands

This section describes the available route commands for gateways.

ADD ROUTE

Syntax

```
ADD ROUTE FROM <reader_name> TO <writer_name>;
```

Usage

Adds a route between a reader named *<reader_name>* to a writer named *<writer_name>* to allow alerts to pass through the gateway.

Example

```
ADD ROUTE FROM NCOMS_READER TO ARS_WRITER;
```

REMOVE ROUTE

Syntax

```
REMOVE ROUTE FROM <reader_name> TO <writer_name>;
```

Usage

Removes an existing route between a reader named *<reader_name>* and a writer named *<writer_name>*.

Example

```
REMOVE ROUTE FROM NCOMS_READER TO ARS_WRITER;
```

SHOW ROUTES

Syntax

```
SHOW ROUTES;
```

Usage

Shows all currently configured routes in the gateway. This command can only be used interactively.

Example

```
1> SHOW ROUTES;
2> GO
Reader                               Writer
-----
NCOMS_READER                         SNMP_WRITER

1>
```

Configuration Commands

This section describes the available configuration commands for gateways.

LOAD CONFIG

Syntax

```
LOAD CONFIG FROM '<filename>';
```

Usage

Loads a gateway configuration file from a file named in *<filename>*.

Example

```
LOAD CONFIG FROM '/disk/config/gateconf.conf';
```

SAVE CONFIG

Syntax

```
SAVE CONFIG TO '<filename>';
```

Usage

Saves the current configuration of the gateway into a file named in *<filename>*.

Example

```
SAVE CONFIG TO '/disk/config/newgate.conf';
```

DUMP CONFIG

Syntax

```
DUMP CONFIG [FORCE];
```

Usage

Clears the current configuration. If the gateway is active and forwarding alerts, this command will not clear the configuration unless the optional keyword **FORCE** is used.

Example

```
DUMP CONFIG;
```

General Commands

This section describes the available general commands for gateways.

SHUTDOWN

Syntax

```
SHUTDOWN [FORCE];
```

Usage

Instructs the gateway to shutdown; all readers and writers are stopped. By default, the gateway is not shut down if interactive changes to the configuration have not been saved. See [SHOW SYSTEM, page F-15](#) for details on how to determine if the configuration has been changed interactively.

If the optional **FORCE** keyword is used, the gateway is shut down, even if the configuration has been changed interactively.

Example

```
SHUTDOWN;
```

SET CONNECTIONS

Syntax

```
SET CONNECTIONS {TRUE | FALSE | YES | NO};
```

Usage

Allows or disallows interactive connections to the gateway. When set to **FALSE** or **NO**, it is not possible to log in to the gateway with **nco_sql**. When set to **TRUE** or **YES**, it is possible to log in to the gateway with **nco_sql**. This command determines whether interactive reconfiguration is allowed.

Example

```
SET CONNECTIONS TRUE;
```

SHOW SYSTEM

Syntax

```
SHOW SYSTEM;
```

Usage

Displays information about the current gateway settings. The parameters returned are shown in [Table F-2](#)

Table F-2 Show System Parameters

System Parameter	Description
Version	Version number of the gateway.
Server Type	Type of server. Should be Gateway .
Connections	Status of the SET CONNECTIONS flag. See SET CONNECTIONS , page F-15.
Debug Mode	Status of the SET DEBUG MODE flag. See SET DEBUG MODE , page F-16.
Multi User	Gateway multi-user mode. Should be YES .
Configuration Changed	If the configuration has been changed interactively, this will be YES .

More parameters may be returned when in debug mode. This command can only be used interactively.

Example

```

1> SHOW SYSTEM;
2> GO
System Parameter      Value
-----
Version              3.6
Server Type          Gateway
Connections           ENABLED
Debug Mode           NO
Multi User           YES

```

SET DEBUG MODE

Syntax

```
SET DEBUG MODE {TRUE | FALSE | YES | NO};
```

Usage

Sets the debugging mode of the gateway. When set to **TRUE** or **YES**, debugging messages are sent to the log file. The default setting is **NO** or **FALSE**. This command should only be used under the advice of Cisco Systems Support.

Example

```
SET DEBUG MODE NO;
```

TRANSFER

Syntax

```
TRANSFER '<tablename>' FROM <reader_name> TO <writer_name> [AS '<tableformat>']
{DELETE | DELETE <condition> | DO NOT DELETE}
[USE TRANSFER_MAP] [USING FILTER <filter_clause>];
```

Usage

Transfers the contents of one database table to another database table. You can use this command to transfer tables between Sybase, Oracle, Informix, ODBC, CORBA, and Socket gateways.

The **tableformat** specifies the format of the destination table if it is different from the source table format.

The **DELETE** and **DO NOT DELETE** clauses define how the destination table is processed. By default, the contents of the destination table are deleted before the contents of the source table are transferred. You can optionally specify a condition that determines whether the deletion will occur. If you specify **DO NOT DELETE**, the contents of the destination table are not deleted before the contents of the source table are transferred.

**Note**

The **DELETE** clause does not function with the Socket and CORBA gateways.

The **USE TRANSFER_MAP** clause instructs the gateway to use the mapping definition that is assigned as the map to the writer used in the **TRANSFER** command. The **USE TRANSFER_MAP** clause is only available for use with the Oracle gateway.

An optional filter clause may be applied by specifying **USING FILTER** followed by the filter. Enter a valid filter, as described in the **CREATE FILTER** command.

Example

```
TRANSFER 'alerts.conversions' FROM NCO_READER TO SYBASE_WRITER AS  
'alerts.conversions' DELETE;  
  
TRANSFER 'alerts.status' FROM NCOMS_READ TO DENCO_WRITE AS 'ncoms.status'  
USING FILTER 'ServerName = \'NCOMS\'' DELETE USE TRANSFER_MAP;
```

Common Gateway Error Messages

Table F-3 contains common gateway error messages that can occur in all gateways. The term *<gateway>* in each error message refers to the individual gateway name and indicates which gateway is running.

Table F-3 Common Gateway Error Messages

Error	Description	Action
<p><i><gateway></i> Writer: HashAlloc failure in <i>_<i><gateway></i></i>CacheAdd().</p> <p><i><gateway></i> Writer: MemStrDup() failure in <i>_<i><gateway></i></i>CacheAdd().</p> <p><i><gateway></i> Writer: Failed to allocate memory.</p> <p><i><gateway></i> Writer <i><name></i>: Memory allocation failed.</p> <p><i><gateway></i> Writer: Memory allocation failure.</p> <p><i><gateway></i> Writer: Memory allocation error.</p> <p><i><gateway></i> Writer: Memory reallocation error.</p> <p>Failed to allocate memory in writer <i><name></i>.</p> <p><i><gateway></i> Writer <i><name></i>: Could not create serial cache - memory problems.</p> <p><i><gateway></i> Writer <i><name></i>: Failed to allocate memory for a GPCModule handle.</p>	<p>The gateway failed to allocate memory.</p>	<p>Try to free more memory.</p>
<p><i><gateway></i> Writer: Failed to lock connection mutex.</p>	<p>The writer failed to lock the Cisco Info Server feedback connection in order to access the connection and feed back problem ticket data for the associated alert. This lock failure may be due to insufficient resources or as a result of the underlying threading system preventing a deadlock between multiple threads that are contending for the resource.</p>	<p>See your support contract for information about contacting the help desk.</p>

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<gateway> Writer: Failed to re-acquire alert details from OS.	This error message comes from the gateway cache reclamation sub-system. This message indicates that the gateway failed to re-acquire the trouble ticket number and reclaim its internal cache entry from the Cisco Info Server.	See your support contract for information about contacting the help desk.
<gateway> Writer: Invalid datatype for problem number feedback field.	The data type is invalid.	See Cisco Info Server Data Types, page 2-6 for information about data types.
<gateway> Writer: Serial x already in serial Cache. Cannot add.	The gateway tried to add a serial number that already exists.	See your support contract for information about contacting the help desk.
<gateway> Writer: Serial x not found in serial cache. Cannot Delete.	The gateway could not delete this alert because it has already been deleted in Cisco Info Center.	You do not need to do anything.
<gateway> Writer <name>: Failed to construct path to <gateway> Read/Write Module.	The gateway could not locate the reader/writer module application.	Check that the module is installed in the correct location.
<gateway> Writer <name>: Failed to construct the argument list for <gateway> Module.	Failed to construct the argument list for gateway module.	Check that the arguments in the configuration file are set correctly.
<gateway> Writer <name>: GPCModule creation failed.	Failed to create GPCModule due to insufficient memory.	Try to free more memory.
<gateway> Writer <name>: Failed to start the OS<gateway> Writer. <gateway> Writer <name>: Failed to start the <gateway>-OS Reader.	Failed to start the Cisco Info Server to gateway reader or writer module.	Check that the module is installed in the correct location and that the file permissions are set correctly.
<gateway> Writer <name>: Failed to shutdown <gateway> Writer.	Failed to stop gateway Writer module.	Check the writer log file for more information.
<gateway> Writer <name>: Failed to construct path to <gateway> Read/Write Module.	Failed to construct the path to the gateway Read/Write Module application.	Check that the module is installed in the correct location and that the file permissions are set correctly.
<gateway> Writer <name>: Failed to find the <gateway> Read/Write Module [x].	Cannot find the module binary.	Check that the module is installed in the correct location and that the file permissions are set correctly.

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<gateway> Writer <name>: Incorrect permissions on the <gateway> module binary [x].	The module's file permissions are set incorrectly.	Check that the module is installed in the correct location and that the file permissions are set correctly.
<gateway> Writer <name>: Failed to create the Serial Cache Mutex.	The gateway writer failed to create the necessary data protection structure for the internal serial number cache due to insufficient resources. This is generally due to insufficient memory.	Try to free more memory.
<gateway> Writer <name>: Failed to create the Conn Mutex.	The gateway writer failed to create the necessary data protection structure for the Cisco Info Server connection due to insufficient resources.	Try to free more memory.
<gateway> Writer <name>: Failed to start the <gateway>-to-OS service thread.	The gateway failed to spawn the service thread.	Check that the gateway can access the Cisco Info Server.
<gateway> Writer <name>: Failed to send a shutdown request to the <gateway> Writer.	The gateway did not shut down cleanly.	Check the writer log file for more information.
Failed to install SIGCHLD handler. Failed to install SIGPIPE handler.	The gateway failed during handler installation.	See your support contract for information about contacting the help desk.
No <mapname> attribute for <gateway> writer <name>.	The gateway could not find the map name.	Check the configuration file.
<mapname> attribute is not a name for <gateway> writer <name>.	Incorrect writer name given.	Check the configuration file.
A MAP called <map> does not exist for <gateway> writer <name>.	The gateway could not find specified map.	Check the configuration file.
MAP <map> is invalid for <gateway> writer <name>.	The given map is not valid.	Check the configuration file.
Map <map> is not the journal map and cannot contain the <journal map name> map item in <gateway> Writer <name>.	If this map is not the journal map, then the JOURNAL_MAP_NAME attribute is set incorrectly.	Check the JOURNAL_MAP_NAME attribute in the gateway configuration file.
<gateway> Writer: Failed to send <gateway> Event to the <gateway> Writer module.	The gateway failed to send a given event.	Check the log files for more information.
<gateway> Writer: Failed to wait for return from the <gateway> Writer module.	There was an error in retrieving the success statement.	Check the log files for more information.

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<gateway> Writer: Failed to read the status return message from the <gateway> Writer module.	The gateway failed to retrieve the status of a module.	Check the log files for more information.
<gateway> Writer: Failed to send event to <gateway>.	The module failed to send the event to gateway.	Check the log files for more information.
<gateway> Writer: <gateway> Writer Module experienced Fatal Error.	There was a fatal error.	Check the log files for more information.
<gateway> Writer: Failed to send event to <gateway>. Unknown type.	The gateway received unexpected type.	See your support contract for information about contacting the help desk.
<gateway> Writer: Failed to build serial index.	The gateway failed to build indexes.	Check that the Serial column exists in the Cisco Info Server alerts.status table.
Incorrect data type for the Serial column.	The gateway did not receive the correct data type.	Check that the data type for the Serial column in the Cisco Info Server alerts.status table is an integer.
<gateway> Writer: Failed to build server serial index.	The gateway failed to get the server serial index.	Check that the ServerSerial column exists in the Cisco Info Server alerts.status table.
Incorrect data type for the ServerSerial column.	The gateway did not receive the correct data type.	Check that the data type for the ServerSerial column in the Cisco Info Server alerts.status table is an integer.
<gateway> Writer: Failed to build server name index.	The gateway failed to get the server name index.	Check that the ServerName column exists in the Cisco Info Server alerts.status table.
Incorrect data type for the ServerName column.	The gateway did not receive the correct data type.	Check that the data type for the ServerName column in the Cisco Info Server alerts.status table is a string.
<gateway> Writer: Failed to find field <fieldnumber> in <gateway> Event.	The gateway could not find the field number it was looking for.	See your support contract for information about contacting the help desk.
<gateway> Writer: Invalid field name for expansion on action SQL [<field>].	The gateway did not receive a valid field name.	See Chapter 2, "Cisco Info Server SQL," for information.

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<gateway> Writer: Unenclosed field expansion request in action SQL [<i>sql action</i>].	The gateway did not find an enclosing bracket.	Check the action.sql file.
<gateway> Writer: Failed to turn counter-part notification back-on. Fatal error in <gateway>-to-OS Feedback. <gateway> Writer: Failed to turn counter-part notification off. <gateway>-to-OS Feedback failed.	The gateway failed to send a notify command.	This is an internal error. See your support contract for information about contacting the help desk.
<gateway> Writer: Failed to send SQL command to Info Server. <gateway>-to-OS Feedback failed.	The gateway failed to send the SQL command to the Cisco Info Server.	Check the Cisco Info Server log file.
Failed to find the column <column_name> in map <map_name>.	The gateway failed to find the given column.	Check that the given column name is entered correctly in the configuration file and that it appears in the Cisco Info Server alerts.status table.
<gateway> Writer: Failed to lock the cache mutex.	The writer failed to lock the Cisco Info Server feedback connection in order to access the connection and feed back problem ticket data changes for the associated alert.	This lock failure may be due to insufficient resources or as a result of the underlying threading system preventing a deadlock between multiple threads that are contending for the resource.
Failed to find cached problem ticket for serial <serial number> using map <map name>.	The gateway failed to find the specified cache problem ticket number.	Check that the specified ticket was originally created by the gateway.
<gateway> Writer: Failed to unlock the cache mutex.	After access to the cache, an attempt to unlock the data structures protection lock failed. This message indicates that the gateway is in a position which will lead to a deadlock situation.	See your support contract for information about contacting the help desk.
<gateway> Writer: Cache add error.	The gateway could not add the serial to the serial cache due to insufficient resources.	Try to free more memory.
<gateway> Writer <name>: Failed to create <gateway> Event for journal update.	The gateway failed to create the journal event update.	Check the writer log file.
<gateway> Writer <name>: Failed to send journal update event to <gateway>.	The gateway failed to send journal event update.	Check the writer log file.

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<attribute name> attribute is not a string for <gateway> writer <name>.	An attribute in the writer was of an incorrect data type.	Check the writer definition in the configuration file.
No <attribute name> attribute for <gateway> writer <name> given.	The gateway failed to find the attribute.	Add the attribute to the writer definition in the configuration file.
<gateway> Writer <name>: Failed to find the <counterpart attribute> attribute for the writer. This is necessary due to bi-directional nature.	An attempt to find the necessary counterpart attribute failed.	Check the configuration file.
<gateway> Writer <name>: Is not a name for an Info Server reader.	The gateway found an incorrect data type.	Check the configuration file.
<gateway> Writer <name>: Reader <reader> was not found for counterpart.	The reader was not found.	Check the counterpart configuration in the configuration file.
<gateway> Writer <name>: Failed to send SKIP Command.	This command failed to disable IDUC on a bidirectional connection.	See your support contract for information about contacting the help desk.
Connection to feedback server failed.	The gateway failed to make connection.	Check the Cisco Info Server log file.
Failed to set the death call on the feedback connection.	The gateway failed to set the necessary property.	This is an internal error. See your support contract for information about contacting the help desk.
Writer counterpart error.	The gateway failed to find counterpart attribute for gateway writer.	Check the counterpart configuration in the configuration file.
<gateway> Writer: Failed to stat() the action SQL file <filename>.	The gateway failed to start file in order to determine its size.	Check the file access permissions for the specified action file.
<gateway> Writer: Empty action SQL file <filename>.	File <filename> is empty.	Check the file.
<gateway> Writer: Failed to open the action SQL file <filename>.	The gateway failed to open the file.	Check the file permissions.
<gateway> Writer: Failed to read the action SQL file <filename>.	The gateway failed to read the file.	Check the file permissions.
<gateway> Writer: No Action SQL find in file <filename>.	There is no action SQL in the file.	Check the file.
<gateway> Writer <name>: Failed to read the conversions table.	The gateway failed to read the conversions table.	Check the file permissions.

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<gateway> Writer: Failed to find PM %s in cache for return PMO event.	The gateway has received a Problem Management Open return event from gateway for the problem ticket. When an attempt was made to look up the problem ticket number in the writers cache, in order to determine the serial number of the tickets associated alert, no record could be reclaimed or found.	See your support contract for information about contacting the help desk.
<gateway> Writer: Open Feedback Failed.	The gateway failed to construct the open action SQL statement or send the SQL action command to the server.	Check the Cisco Info Server SQL file.
<gateway> Writer: No Update action SQL for <gateway> Update event.	There is no update action SQL statement.	Check the configuration file.
<gateway> Writer: Failed to find PM %s in cache for return PMU event.	The gateway has received a Problem Management Update return event from gateway for the problem ticket. When an attempt was made to look up the problem ticket number in the writer's cache in order to determine the serial number of the tickets associated alert, no record could be reclaimed or found.	See your support contract for information about contacting the help desk.
<gateway> Writer: Update Feedback Failed.	The gateway failed to construct the open action SQL statement or send the SQL action command to the server.	Check the Cisco Info Server log file.
<gateway> Writer: Failed to find PM %s in cache for return PMJ event.	The gateway has received a Problem Management Journal return event from gateway for the problem ticket. When an attempt was made to look up the problem ticket number in the writer's cache in order to determine the serial number of the tickets associated alert, no record could be reclaimed or found.	See your support contract for information about contacting the help desk.
<gateway> Writer: Journal Feedback Failed.	The gateway failed to construct the open action SQL statement or send the SQL action command to the server.	Check the Cisco Info Server log file.

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<gateway> Writer: Failed to find PM %s in cache for return PMC event.	The gateway has received a Problem Management Close return event from gateway for the problem ticket. When an attempt was made to look up the problem ticket number in the writer's cache in order to determine the serial number of the tickets associated alert, no record could be reclaimed or found.	See your support contract for information about contacting the help desk.
<gateway> Writer: Close Feedback Failed.	The gateway failed to construct the open action SQL statement or send the SQL action command to the server.	Check the Cisco Info Server log file.
Received error code <code> from Reader/Writer Module - [<message>].	The gateway received an error message.	Check the module log files.
<gateway> Writer: Failed to read <gateway> event from <gateway> Reader Module.	The gateway failed to read the event sent by the gateway reader module.	Check the reader log files.
<gateway> Writer: Received event of type <event type> which was unexpected.	The gateway received an unknown event type.	See your support contract for information about contacting the help desk.
<gateway> Writer: Received invalid known message from Reader/Writer Module for this system.	The gateway received an invalid known message.	See your support contract for information about contacting the help desk.
<gateway> Writer: Received unknown message from Reader/Writer Module.	The gateway received an invalid unknown message.	See your support contract for information about contacting the help desk.
<gateway> Writer: Failed to block on data feed from <gateway> Reader Module.	The gateway failed to block due to a shutdown request. This message is displayed when the gateway is shutting down.	See your support contract for information about contacting the help desk.
<gateway> Writer: Fatal thread termination. Stopping gateway.	A thread exited unexpectedly.	Check the gateway log files.
<attribute name> attribute is not a string for <gateway> writer <name> - IGNORED	An attribute name is not recognized. The gateway will ignore it.	Check the gateway log files.
<attribute name> attribute must be set to TRUE or FALSE for writer <name>.	An attribute name has not been set to TRUE or FALSE .	Check the gateway configuration file.
<gateway> Writer <name>: Failed to shutdown <gateway> Reader/Writer Modules.	The gateway failed to shut down reader/writer modules.	Check the module log file.

Table F-3 Common Gateway Error Messages (continued)

Error	Description	Action
<gateway> Writer <name>: Failed to disconnect feedback connection.	The disconnect of feedback channel failed.	Check the Cisco Info Server log file.
Failed to create <gateway> event structure for a problem management open event in writer <name>.	The gateway writer failed to allocate a gateway event structure for a problem management open event due to insufficient memory resources.	Try to free more memory.
<gateway> Writer: FEEDBACK FAILED!	The gateway failed to store the problem number.	Check the Cisco Info Server log file.
Failed to create journal for <gateway>writer <name> (from INSERT)	The gateway failed to create journal.	Check the writer log file.
Failed to create <gateway> event structure for a problem management update event in writer <name>.	The gateway writer failed to allocate a gateway event structure for a problem management update event due to insufficient memory resources.	Try to free more memory.
<gateway> Writer <name>>: Failed to delete problem ticket from cache for serial <serial number>.	The gateway failed to delete serial number from cache.	This is an internal error. You can ignore it.
Failed to create <gateway> event structure for a problem management close event in writer <name>.	The gateway writer failed to allocate a gateway event structure for a problem management "close" event due to insufficient memory resources.	Try to free more memory.